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PTO-SB-08A (08-00)

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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known	
Application Number	09/724,784
Filing Date	11/28/00
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003000US

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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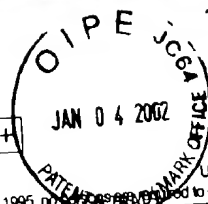
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## **OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
u	1	Gass et al., "Integrated flow-regulated silicon micropump," <u>Sensors and Actuators A</u> , 43335-338 (1994).	
u	2	Sohn et al., "Capacitance cytometry: Measuring biological cells one by one," <u>PNAS</u> , 97(20):10687-10690 (2000)	
u	3	Zengerle et al., "A Micro Membrane Pump with Electrostatic Actuation," <u>1992 IEEE Conf. on Micro Electro Mechanical Systems</u> , held 2/4-7/92 in Travemunde Germany, pgs. 19-24.	
u	4	Zengerle et al., "Performance Simulation of Microminiaturized Membrane Pumps," from 7th International Conference on Solid-State Sensors and Actuators held 6/7-10/93 in Yokohama Japan, pages 106-109.	

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Application Number	09/724,784
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## U.S. PATENT DOCUMENTS

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		Number	Kind Code <sup>2</sup> (if known)			
✓	AA	2001/0027745	A1	Weigl et al	10-11-2001	
✓	AB	6,296,673	B1	Santarsiero et al	10-02-2001	
✓	AC	6,123,769		Sarjoh	09-26-2000	
✓	AD	5,400,741		DeTitta et al	03-28-1995	
✓	AE	5,126,115		Fujita et al	06-30-1992	

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✓	AF	WO	00/60345	A1		10-12-2000		

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1	AA	5,932,799		Moles	08-03-1999	
2	AB	5,775,371		Pan et al.	07-07-1998	
3	AC	5,642,015		Whitehead et al.	06-24-1997	
4	AD	5,593,130		Hansson et al.	01-14-1997	
5	AE	5,290,240		Hortes, Jr.	03-01-1994	
6	AF	4,898,582		Faste	02-06-1990	

## FOREIGN PATENT DOCUMENTS

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<b>Filing Date</b>	November 28, 2000
<b>First Named Inventor</b>	Unger et al.
<b>Art Unit</b>	1772
<b>Examiner Name</b>	Unassigned
<b>Attorney Docket Number</b>	20174C-003000US

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Sheet	1	of	2
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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.



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Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003000US

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
5	AM	Quake et al., "From Micro- to Nanofabrication with Soft Materials," <u>Science</u> , 290:1536-1540 (2000).	
7	AN	Unger et al., "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography," <u>Science</u> , 288:113-116 (2000).	
2	AO	Van de Pol et al., "A Thermo-Pneumatic Actuation Principle for A Microminature Pump and Other Micromechanical Devices," <u>Sensors and Actuators</u> , 17:139-143 (1989)	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> JUN 18 2004 (use as many sheets as necessary)		Application Number	09/724,784
		Filing Date	November 28, 2000
		First Named Inventor	Marc Unger
		Art Unit	1732
		Examiner Name	Allan W. Olsen
		Attorney Docket Number	20174C-003000US
Sheet 1 of 1	of 1		

NON PATENT LITERATURE DOCUMENTS			
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	1	CARTER et al., Protein Crystallization Using Incomplete Factorial Experiments, the Journal of Biological Chemistry, 1979, pp. 12219-12223, Vol. 254, No. 23.	
	2	CARTER et al., Statistical Design of Experiments for Protein Crystal Growth and the Use of a Precrystallization Assay, Journal of Crystal Growth 90, 1998, pp. 60-73.	
	3	JARAMILLO et al., Crystallization and Cryocrystallography inside X-ray capillaries, J. Appl. Cryst. (2001), 34, pp. 365-370.	
	4	KAMHOLZ et al., Quantitative Analysis of Molecular Interaction in a Microfluidic Channel: The T-Sensor, Analytical Chemistry, Vol. 71, No. 23, December 1, 1999, pp. 5340-5347.	
	5	LIN et al., Convective-diffusive transport in protein crystal growth, Journal of Crystal Growth, 151 (1995), pp. 153-162.	
	6	LUFT et al., Kinetic Aspects of Macromolecular Crystallization, Methods in Enzymology, 1997, pp. 110-130, Vol. 276.	
	7	MILLER et al., A Comparison between Protein Crystals Grown with Vapor Diffusion Methods in Microgravity and Protein Crystals using a Gel Liquid-liquid diffusion Ground-Based Method, Journal of Crystal Growth 132 (1992), pp. 306-309	
	8	NERAD et al., Ground-Based Experiments on the Minimization of Convection During the Growth of Crystals From Solution, Journal of Crystal Growth, 1986, pp. 591-608, Vol. 75.	
	9	RUIZ et al., Agarose as Crystallization Media for Proteins I: Transport Processes, Journal of Crystal Growth, 2001, pp. 165-172, Vol. 232.	
	10	RUIZ et al., Investigations on Protein Crystal Growth by the Gel Acupuncture Method, Acta Crystallographica, 1994, pp. 484-490, Section D.	
	11	SALEMME, A Free Interface Diffusion Technique for the Crystallization of Proteins for X-Ray Crystallography, Archives of Biochemistry and Biophysics, 1972, pp. 533-539, Vol. 151.	
	12	THOMAS et al., Distribution coefficients of Protein Impurities in Ferritin and Lysozyme Crystals Self-Purification in Microgravity, Journal of Crystal Growth 211 (2000), pp. 149-156.	

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